

IN THE DRAWINGS

Please cancel the figure here at which the Examiner has deemed was added as page 3 in the last Office Action.

REMARKS

The drawings filed on 1/05/05 have been objected to. Please note that the drawing page which the Examiner has included as page 3, has now been cancelled. This should obviate the Examiner's rejection.

The specification as amended on 1/05/05 has been objected to under 35 U.S.C. §132. The specification has now been amended to obviate the Examiner's rejection.

Claims 1-4 and 6-9 have been rejected under 35 U.S.C. §112, second paragraph. The claims have been amended to obviate the Examiner's rejection.

Claims 1-3 and 6 have been rejected under 35 U.S.C. §102(b) as being anticipated by Kerchner, U.S. Patent No. 1,944,184. The claims have now amended are directed to a rotary sanding tool for moldings having at least one part remotely part pad and having at least one peripheral row of abrasive-coating sanding segments that are slipped onto pad elements affixed to the pad. A locking unit movable in an axial direction with which at least the sanding segments of one peripheral row is mounted on the pad elements. The locking unit is movable in an axial direction with at least the sanding segments of one peripheral row mounted on the pad elements. The locking unit has a retaining ring on which a locking cage is mounted and the retaining ring is coupled by a rotatable adjusting nut in such a way that the locking unit executes a linear movement by the turning of the adjusting nuts.

On the other hand, Kerchner '184 is directed to the production of articles by grinding. However, according to column 1, beginning on line 6, it is clearly pointed out that the rotary sanding tools used for grinding wood to produce paper pulp.

Consequently, wood has to be chipped which is not possible with the rotary sanding tools in question. The rotary sanding tool, according to the '184 reference, consists as shown in Figure 1 of a ring-shaped, rigid abrasive ring which is typically manufactured from hard abrasive grains being embedded in a mass. As shown in figure 3 and 4 of the reference, there are three abrasive rings arranged side by side. Each abrasive ring consists of eight single segments which are designed as massive parts. Concerning both constructions, either the abrasive ring consisting of one part or the abrasive ring formed from these single segments are held by two collateral flanges 3, 4. Those flanges are suspended at an axle 2 which is in the region of flange 3. By this construction, axial forces are excited which effect the collateral face surfaces. Furthermore, the ring surfaces contacting the inner surface of the flanges are beveled construction so that even centrifugal forces or radial forces are absorbed. The construction according to figures 3 and 4 makes more sense as it can be prevented that a segment is centrifuged from the construction. The inner segments are additionally secured by rings with a square cross section.

Moreover, both flanges 3 and 4 are tightened by five pins 5. Those pins are arranged directly adjacent to the inner surface of the abrasive ring in order to prevent that the outer border areas of the flanges 3, 4 are pressed outside by which the effect would be deteriorated. As the sanding wheel should be used for the production of chippings, it could also be considered as a chipping tool. However, such sanding wheels are also utilized in metal-working enterprises in order to sharpen metal tools or to ameliorate the surface quality of non-machined metal bars and plates.

Thus, the Applicants invention is not anticipated by Kerchner '184.

Claims 1-3 and 6, 7 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Becker et al., U.S. Patent No. 4,777,771 in view of Kerchner'184.

The Examiner's rejection is respectfully traversed.

The applicants believe that the teachings of Kerchner '184 should not be combined with Becker et al.'771. It is to be noted that the surface quality of moldings made of wood or wood-like material is to be ameliorated by the sanding wheels. Unless double-segment sanding wheel is concerned which consists of parts that are shown in figure 1 and 2. For a single sanding machine only the components shown in figure 1 and figure 2 are required. The essential portions of U.S. Patent No. 4, 777,771 it is a fact that the sanding segments 14 with the abrasive layer of 14a are inserted into the sanding segment retainers 11 in two different positions. This is shown in figures 3 and 4. In figure 3, the elevated are positioned on one side while they are arranged alternately on both sides according to the construction in figure 4. The standing segments 14 do not have to be always equal but can differ from each other, for example by grinding a different radius. Each sanding wheel consists of the body 10 or 10a which is designed like a cage. Those basic bodies are shaped in such a way that they can be inserted into each other in a laterally reversed way so that the sanding segments 14 are arranged to one another with an extremely small distance. It is shown in figures 5 and 6 how the sanding segments are connected to the basic bodies. Afterwards, the adjusting nut 19, which consists of a metal profile strip 19b and a basic profile segment 19a which is made of an elastic material is put upon the sanding segment retainer of each basic body. The sanding segment 14 is put upon the adjusting nut 19. It consists of a molded part made of a plastic foil by a deep pulling method corresponding to the respective cross section of the

strip to be sanded and an outer abrasive layer 14a which has been glued to it. This sanding segment 14 is provided with diagonal clamping surfaces 21 on both front sides. The locking is provided by clamping cap 12 and 13 or 12a and 13a respectfully, whereby the clamping caps 13 and 13 a are shaped like a cage. The webs of cage are located directly under the sanding segment retainers 11. Even concerning the well known construction of the sanding segments 14 which are held by the axially movable clamping cap 12, 12a, 13a, and 14a. Those clamping caps are however put upon the sanding axle 16 and adjusted by adjusting rings or retaining rings. The clamping caps can be compared to the flanges 3 and 4 according to U.S. Patent No. 1,944,184. However, not only the purpose of use of the rotary sanding tools is absolutely different but also the complete construction.

For the reasons discussed above, Claims 1-3 and 6, 7 and 9 are not obvious in view of the prior art of record.

The application is now considered to be in condition for allowance, and an early indication of same is earnestly solicited.

Respectfully submitted,



Arlene J. Powers
Registration No. 35,985
Gauthier & Connors
225 Franklin Street, Suite 2300
Boston, Massachusetts 02110
Telephone: (617) 426-9180
Extension 110